OPPORTUNITY COST

One of the most fruitful sources of confusion in recent economic thought lies in the difference between the social and the individual point of view. No economist, the writer believes, has ever carried out a consistent analysis from either point of view; and the result has been a notable lack of clarity. The writer suspects that some thinkers have even shifted unconsciously from one to the other way of looking at things, a procedure which, of course, is fatal to precision of analysis. The difference in scope and function of economic factors as viewed from the often divergent interests of mere individual and social individual permeates all the elementary concepts of the science. The concept of cost, however, is one of the latest to have become involved in the confusion, and it is toward that one element that this article is directed.

The two points of view, social and individual, as involved in cost, may be confused in at least two ways. (1) They may both be adopted without logical discrimination and used in a treatment which on the whole is either "societistic" or individualistic. This is the more common fault. It appears, for example, in a widely used text, through the inclusion in a list of costs of some which are valid only from the one viewpoint and others which are valid only from the other viewpoint.[1] (2) But a no less serious shortcoming is apparent when the one is adopted, not with due recognition of the existence of the other, but as superseding that other. That, too, is confusion in its way. In the past, certain German "Nationalists" and the Frenchman, Sismondi, in belittling analysis which had proceeded from the individualistic viewpoint illustrated, perhaps, such a confusion. Today, those who would supersede the social viewpoint show this tendency. Professor H. J. Danvenport is undoubtedly the most consistent and vigorous representative of the last mentioned tendency, and his brilliant thought in this field has already exerted some influence. The confusion of the first type is witness to this fact.

It is the writer's purpose in what follows to show that the social viewpoint cannot logically be superseded and that a purely individualistic concept of cost is fatal to fundamental economic analysis. For the most part the discussion will run upon the

[1] Ely *et al, Outlines,* pp. 125-126; also Taylor, F. M., *Principles of Economics,* pp. 44-51.

significance of the entrepreneur viewpoint with regard to costs and the true meaning of "opportunity cost," so-called; for it is in these particular points that the individualistic confusion of costs appears in most striking form. The one-sided and exaggerated individualism of a few thinkers fails to keep the balance between fundamentals and intermediate processes. Just as there is danger of going too far in emphasizing the significance of money in price determination, so there is danger of overemphasizing the significance of the entrepreneur, and with this danger is associated the more fundamental one of putting the individual's estimate in the place of the forces which determine that estimate. While the most thoughtful representatives of extreme individualistic analysis make qualifications that render it difficult to "pin them down," it is clear that they hold that any attempt to explain price on the supply side "is hopeless unless in terms of constant reference" to entrepreneurs' "opportunity cost,"[2] and that the supply of factors in any industry together with the outlay for them is determined *for the most part* by "the relative remunerations possible in competing industries or under competing employers."[3]

The writer will endeavor to demonstrate: (1) that this reasoning begs the point in question in economic analysis; (2) that the so-called "opportunity cost" is not a cost in any true or price-determining sense; and (3) that the importance of the entrepreneur viewpoint, being quite secondary, has been exaggerated and made the basis of serious error.

(1) The burden of the extreme individualistic analysis is the relation of cost to value or price. Yet in dealing with this relation it is tainted throughout by that plague of logic, question begging. Is it not obvious that no fundamental examination of a relation can be completed where one element of the relation is taken for granted? Now the individualistic or entrepreneur analysis takes price for granted. Perhaps this is most notable in the reasoning on "opportunity cost." Here the burden of the argument is that costs are largely, if not entirely, relative sacrifices and are determined by the alternatives or opportunities which are open to a producer. Costs, to economists of this type, seem measured by comparing one "advantage" with another or by balancing the

[2] Davenport, "Cost and Its Significance," AMERICAN ECONOMIC REVIEW, vol. I, p. 743.

[3] Davenport, *Value and Distribution*, p. 382, n.

"desirabilities" of two employments. For example, an entrepreneur is assumed who sells hats which involve "outlay and trouble" equivalent to $1.75 (assumed), at $2 (assumed), thus getting a profit of 25 cents on each hat. If, with the same "outlay and trouble," the entrepreneur could sell shoes at $1.90 (assumed), the price of hats could not fall below $1.90 without his leaving the hat business. Therefore his cost is $1.90—not the "outlay and trouble." At $1.90 the hat man would be a marginal producer; marginality is thought of as a matter of relative "gain."

But it will be observed that what is compared here is "gain" or "advantage." Now gain or advantage is a net concept; it depends upon a comparison of outlay and trouble on the one hand with price income on the other. It can be conceived of in no way but by taking for granted the price from which the income (the excess of which measures gain) is derived. How, then, can one thus gravely set about basing the costs which are to enter the entrepreneur's business plans upon a calculation which assumes the prices which he is to get for his products? The very question is to learn how costs enter the determination of prices. The answer begs the question.

To make the same point a little more concretely, take the hat-shoe illustration. The $2 per hat is the exchange value of the hat stated in terms of a money medium; so also is the $1.90 received for shoes. How does the $1.90 affect the $2? Why is it not $2.25 instead of $2, or $1.75 instead of $1.90? Granting competition, most economists would answer: "because these amounts would be either in excess of or below costs." The established analysis, in a word, regards costs as absolute quantities of sacrifice.

The opportunity theorist says, when hats fall to this alternative shoe price of $1.90, the hat producer with the alternative will be on the margin—will be a marginal hat producer. But a marginal increment, if of any determinative significance, is one in which marginal utility and marginal disutility coincide and which sells for just enough to cover expenses; whereas the $1.90 hat man is still making 15 cents above absolute costs, and his shifting can neither stop a fall in the price of hats to $1.75 if the demand for hats continues to decrease, nor a similar fall in the price of shoes under similar conditions. In assuming that the alternative is a margin, the reasoning overlooks the fact that marginality in production is an absolute condition set by effective desires of buyers

and the expenses of producers, and so allows the price quality to creep into that which it would make price-determining. Alternative or "opportunity" is a mere index. The alternative and the price and the margin are all contemporaneously determined by the same forces. The true significance of the "opportunity" margin appears from the fact that it *always* comes into play *after* prices change.

The fact that this relative, so-called "opportunity cost" begs the question by assuming value, may be brought out in another way. The procedure followed by these who would illustrate this cost is more complex than is always apparent. It involves at least three comparisons: (1) the utility of one alternative is compared with its cost; (2) the utility of the other alternative is compared with its cost; (3) finally the net results of comparisons 1 and 2 are themselves compared. Thus the net results of two alternatives are judged and evaluated. In the first two comparisons, value is involved. Questions like this of *net* quantities are always questions of value. Indeed this opportunity-cost basis is not a cost basis in any ultimate sense; it is a matter of relative *values*.

Professor Davenport admits there is some circularity in the opportunity-cost analysis, but states that such costs cannot be said to draw their value as costs from the value of that very product in the production of which they function as costs. In view of the simple facts of the case as stated in the preceding paragraph, however, it is evident that a large part of the value of such costs is drawn from that very source. "Opportunity costs" have no meaning at all unless the values of the products involved are compared.

But the thought occurs to one, "Is this, after all, not a special case of the doctrine of comparative costs? And are comparative costs not costs?" In answer it may be stated at once that that doctrine in no way reduces the importance of absolute costs, for the relative quantities compared are based on absolute costs. Moreover, it, too, takes price for granted. Take two nations, A and B, one of which, A, can produce both hats and shoes cheaper than the other, but has the greater advantage in hats. That nation, A, will produce hats, and secure its shoes, possibly by trading hats for the product of the other nation, B. Has any one ever thought that the price of shoes in nation B is a cost to nation A?

The defender of "opportunity cost" points out that certain

economists appear to recognize such a cost in that they say that a minimum profit is set by what entrepreneurs could get as wage-earners. This statement is not without foundation, and the writer would here call attention to the fact that unless carefully guarded, the discussion of minimum profits so common in our texts[4] is open to the same criticism as is the "opportunity-cost" notion in general. The trouble sometimes lies in a confusion of wages with profits. If the two are the same sort of return, then they shade into one another and have a common margin of determination. As profits, in this way of regarding them, decline, the entrepreneur at a certain point ceases to get anything but wages. Obviously, however, if profit is to be an independently determined share, this reasoning will not suffice. If we are to retain entrepreneur responsibility as a separate factor, it must have its separate absolute margin of determination, just as labor and capital-formation do, and as long as there is a return in the shape of profits, which covers the costs of independent responsibility for a business unit, so long may the entrepreneur stick to his post without price-determining loss. He will be a marginal entrepreneur in that his peculiar costs as entrepreneur are just covered by his peculiar income. Now both entrepreneur and capitalists may be able to labor and make good wages. If so, they have alternatives as wage-earners. But there we must apply the analysis of the third paragraph preceding. If the surplus of price-determined income over absolute costs as entrepreneur is less than the surplus of wages income over labor cost, then the entrepreneur may give up his business responsibility. But no price-determining significance attaches to the wage advantage. It is price-determined and merely an index of the forces of demand and supply in the labor market, just as is the relation of profits to entrepreneur's cost in the entrepreneur ability market.

Certainly the situation here is complicated by the fact that we are dealing with factors of production the demand for which is reflected back from products they unite to make—a kind of "composite demand."

The "opportunity-cost" idea is essentially the same as that of alternative land uses, and the relation of both to price is identical. In a paper on "Rent and Price: Alternative Uses,"[5] the

[4] Seager, *Introduction to Economics*, p. 159.

[5] *Quarterly Journal of Economics*, vol. XXIV, p. 127 ff.

writer recently pointed out that this question of alternative (or opportunity) costs or supply limitations cannot be treated apart from price, and that, when so treated, the alternative becomes effective only *after* price has been determined. To paraphrase the words used in the article: "If A is debating whether to put his capital to making hats or to making shoes (outlay and trouble being the same), the decisive thing is the price to be expected for each utility. This determines what his gross returns would be in either employment. It then remains to figure on his expenses, among which he may count his alternative. But the question is, not what A figures are his expenses, but *what determines this alternative?* and what is its relation to the price which A has *counted upon?* If the opportunity theorist would set his "opportunity costs" over against opportunity utilities he would not be able to fall into the error of confusing the value with the cost. Once more, one cannot deal with such concepts as net gain, relative advantage, etc., without having passed into the field of value, and having begged the question.

(2) In what has gone before, the reasons for denying significance to "opportunity cost" as an element in determining value have been implied. The writer, however, would like to state them more formally, and to go further in criticising the "opportunity-cost" idea.

In the first place, the significance of cost is that it is a limitation upon production and supply and so is an ultimate factor in causing and determining value. But even granting for the moment that opportunity might be called a cost, "opportunity cost" has been shown to be the *resultant* of value conditions, and to depend upon the existence of alternatives which are themselves determined by cost limitations and demand. Consequently it cannot logically have the significance of other costs in value determination.

In the second place, however, the writer cannot believe that opportunity constitutes a cost. A first simple illustration taken by Professor Davenport is not happy. A child having been given a peach and a pear is forced to give up one in order to retain the other; therefore the one is the opportunity cost of the other. But there is no opportunity here—opportunity in the sense the word is used generally by Professor Davenport. No "competitive analysis" exists in the case. The alternatives are: give up one or give up both. The robber offers you the opportunity of "displacing"

your money with your life. If you happen to have much money your life costs much; if not a cent, you are cheap. (Will your neighbors' estimate be changed in either case?) Again, no outlay and trouble were involved in the child's acquisition of the fruit; the supply of fruit is not affected; the prices of pears and peaches remain unchanged. The case involves mere subjective worths and has no objective validity. Professor Davenport does well to admit that: "the term *cost* seems not quite satisfactory to cover the case." He suggests that "foregoing" would be better. But what is foregone? The child is "out" a peach, but that fact is through no foregoing. If the peach had been spoiled or lost, the same situation would have existed.

In another illustration we are told that if, having a dollar which you have earned, you choose to purchase a book rather than a knife, the cost of the book is best said to be the knife. It is suggested that some term like displacement or foregoing would be better. But what is displaced or foregone? Is it the knife? If so, are we to suppose that, if you had also happened to think of a circus ticket, a shirt, a different book, etc., *ad infinitum*, your "foregoing" would have been infinitely increased? Truly, you would then be paying dear for the whistle! And, above all, why can the book displace anything? Is it not only because it has a certain value? How could the knife ever displace the book? Is it not because its value is to be assumed? What is being displaced in either case? Surely not the physical thing. And what *sacrifice* is involved in the displacement? No. It is your dollar—your day's ease—which is displaced or foregone. As to the knife, the situation is simply a comparison of utilities, and you choose the thing possessing the highest marginal utility. You choose the course involving the least sacrifice, meaning the greatest want-satisfaction as compared with the sacrifice of your day's earnings.

Or, take the case of a producer with an alternative occupation. The simple, hard-headed query that first enters one's mind is, "Are a man's costs greater merely because he happens to be able to do several things?" And the hard-headed answer is, "No." Assuming competition, the alternative, as such, results in no sacrifice. He merely chooses the course showing the greatest net return. A and B are two producers, each operating with the same outlay and trouble. A has an opportunity in the shape of an alternative employment; B has none. Whose product sells for more? Both

get the same price. Is A's gain less than B's because the opportunity theorist would reckon his costs as outlay and trouble *plus* opportunity? Their gains are the same. But, finally, you ask, if prices fall will A not drop out when his opportunity becomes more attractive, just as if his costs were outlay and trouble plus opportunity? Yes, he will drop out; but in putting the question you have indicated that it is no cost that determines his dropping. You will observe that the occasion for dropping is price-determined; and that the only thing which one could call a cost, in any reasonable use of the term, would arise only if A should refuse to drop. If he should cling to the less gainful alternative or opportunity there might, indeed, be a foregoing, just as if the child had tried to cling to both pear and peach and so sacrificed his chance to save one.

In fact, to the writer, it would seem more reasonable to say that opportunity comes from cost than to argue that cost comes from opportunity; for the opportunity depends in part upon relative costs, and in itself is in no wise to be reckoned as cost.

The essence of cost is sacrifice incurred in order that economic utilities may be created. Now to the writer the sheep's clothing of opportunity seems out of place on the wolf, cost. But more than that, it has not the significance which outlay and trouble have in production. Mere opportunity never created an economic utility. It takes work applied directly or indirectly to "make things." If A's prices fall, A's business becomes less productive to him—less productive of net income to A. He takes up an alternative business. Someone says he is more productive. In the ultra-individualistic sense he may be; but why? Once more, it is because his outlay and trouble in the new line are less, relatively to price income, than in the old one. And this is true not because of the opportunity, but because of the relation between the absolute conditions of outlay-and-trouble-cost and marginal-utility-demand in the two lines. Cost in the generally accepted sense bears a causal relation to utility output. Opportunity, in the last analysis, bears no such relation.

(3) As just indicated, the significance of cost lies in its connection with production, and it is essential to note that the case for "opportunity cost" is inseparably associated with an unusual and inexpedient notion of production. Production in the generally accepted sense consists in the adjustment of the materials and forces

of nature so as to make them better gratify human wants. This definition accords with a social viewpoint, as it includes all net additions to the economic utilities of a society, while at the same time it is not in conflict with a recognition of individual acquisition through exchange. But the ultra-individualistic definition would include all individual gain-getting whether by trade or theft, exchange or arson. Moreover, it holds that a thug who robs men of pocketbooks undergoes costs of production equal to watches (is he not foregoing those golden "opportunities"?) and "produces" gain for thugs. Obviously there is no exchange here, and the important distinction between group life and individual existence is ignored. Opportunity can be conceived of as cost only in a short-sighted, ultra-individualistic notion of production. It would almost seem that the notion of "opportunity cost" has been invented in order to make cases of supply like the child's fruit or the burglar's loot seem to come under some law of cost determination. The burglar business is obviously one in which little relation can exist between outlay-and-trouble cost and the result. So with the other sources of income which are not on an exchange basis.

A logical result of the "opportunity-cost," entrepreneur analysis appears in the treatment of exchange and competition. Freedom of exchange has always been given an important place as a desideratum in social economic analysis, but Professor Davenport and his followers are tending to take away this place. Obviously an economy in which robbery and bribery are deemed productive cannot be one based on exchange, for nothing is exchanged in such activities. It is one-sided economy. Now freedom in exchange is a corner stone of competition. It is natural, then, that we find an insistence upon the productivity of monopoly and a tacit abandonment of competition at points. Thus, while A (a hat maker) can make both hats and shoes, and the less gainful line forms A's cost for the other, we are to infer that B (a shoe maker) is not free to make hats. If the analysis were really competitive, however, capital, all or in part, would be free to flow into either industry from the other, in no great time. Then B would have the $2 hat price as an opportunity (cost) and would be producing shoes (at $1.90) at a loss of 10 cents a pair! Or, assume a series of drops in the price of hats: hats having fallen to $1.88, A takes up the shoe business; the price of shoes then falls to $1.80, and he passes back into hats; and so on, till when?—till the $1.75 "outlay-and-

trouble cost" is reached. With competition it would be the decisive thing. Thus we may conclude that the "opportunity-cost" analysis only pretends to work one way, and is not competitive analysis. And this, together with the conclusion that it is associated with an ultra-individualistic notion of production and an anti-social attitude toward exchange, makes a severe indictment against the whole scheme.

The upshot of this phase of the criticism is that price-determined "costs" (so-called) are worth mentioning only in an individualistic, non-competitive, acquisitive way of looking at things. Granted that "opportunity cost," like rent, *seems* to the individual to be a motivizing resistance in his economy, are we to stop at the shadow? Are we to confuse the index with the forces which it registers? If so, then it is easy to overlook long-time matters and the significance of technological limitations on production, to regard robbery and exchange as equally productive, and to accept "opportunities" as costs of production—otherwise impossible.

As to the secondary importance of the "entrepreneur viewpoint" of recent American thought, let the opportunity theorist speak for himself. "He (the entrepreneur) takes wages as he finds them, rents as the market presents them, interest rates as he must pay them, and so on;........Nor is it any part of his problem to investigate the causes of the prices attaching to his alternative line of production......it does not lie with him to change them ......"[6] He adds that the entrepreneur's view of the facts is a superficial view. This being the case, one may well wonder why such insistence upon the entrepreneur and his "opportunity costs." Why not go back to the real thing?

The same theorists insist, however, that the value problem must be attacked from the entrepreneur viewpoint, "because here is the problem presented in terms of results which the ultimate causes have worked."[7] Now the reader notes that all through the subtle windings of the argument the opportunity theorist emphasizes the fact that "opportunity cost" is an entrepreneur phenomenon and constitutes a large part of entrepreneur's costs. But "opportunity cost" is far from ultimate, and Professor Davenport himself at one point states that it is "plainly superficial." In a word, we are told that an admittedly nonfundamental entrepreneur analysis,

[6] Davenport, "Cost and Its Significance," op. cit., p. 736.
[7] *Ibid.*, p. 746.

based largely upon a nonfundamental "opportunity-cost" concept, presents the results of ultimate causes! The true conclusion which seems to follow from the preceding estimate is that the value problem is not presented in terms of results which *ultimate* causes have worked out. When it is stated that "modifications in the relative supplies of goods come about through the working out by the entrepreneurs of their individual cost computations,"[8] the statement either means that entrepreneurs' costs (including "opportunity cost") help determine supply, or it means next to nothing. If the former, then a conclusive dilemma arises in which one horn is the insignificance of "opportunity cost" and the other is the futility of the entrepreneur viewpoint in value and distribution, though in reality these horns are not necessarily alternatives.

Needless to say, it is the writer's conclusion that entrepreneur's cost is to be sought in the risks attendant upon responsible direction of a business unit, and that this cost is a fundamental one, limiting supply as does labor pain.

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[8] Davenport, *op. cit.* p. 746.